

Application No. 10/777,651
Amendment dated September 18, 2006
Reply to Office Action of May 16, 2006

Docket No.: 2846-0301P

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A CCD-based biochip reader comprising:

a light source for emitting light beams, a collimating lens for converting said light beams into wide parallel rays of light, passing said wide parallel rays of light through a biochip and exciting fluorescence from fluorescent targets on said biochip;

a focusing lens for focusing said fluorescence;

a filter for filtering out said parallel rays of light; and

a charge-coupled device camera for collecting images from said fluorescence,

wherein said light beams comprise flat-top energy light beams whereby energy distribution of the light beams is a non-Gaussian distribution in intensity.

2. (Currently amended) The CCD-based biochip reader according to claim 1, further comprising an image converting device ~~to~~ for converting said images into digital data.

3. (Currently amended) The CCD-based biochip reader according to claim 1, further comprising a platform for holding said biochip and selectively moving in one direction.

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4. (Currently amended) The CCD-based biochip reader according to claim 3, further comprising a computer, wherein said computer comprises at least one set of parameters for controlling the directions of movement of said platform.

5. (Original) The CCD-based biochip reader according to claim 4, wherein said computer comprises at least one set of parameters for converting images of said charge-coupled device into digital data.

6. (Canceled)